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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,560	10/09/2001	Mark A. Johnson	RD-28,600	7497

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EXAMINER

THOMAS, COURTNEY D

ART UNIT	PAPER NUMBER
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2882

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,560

Applicant(s)

JOHNSON ET AL.

Examiner

Courtney Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the present abstract does not accurately reflect the elected invention. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claim 13 is objected to because of the following informalities:
3. Claim 13 recites an apparatus comprising a voice activated control system for controlling "playback imaging sequencing"... Examiner contends that the limitation as written appears to convey more than one interpretation. The term could refer to the playback of images as obtained in a radiological scan or the display of image sequence programming sets used to acquire image data. Examiner notes that the specification does not sufficiently support either case and therefore concludes that the above limitation is ambiguous. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faul et al. (U.S. Patent 5,440,606) in view of Mattson et al. (U.S. Patent 5,303,148).

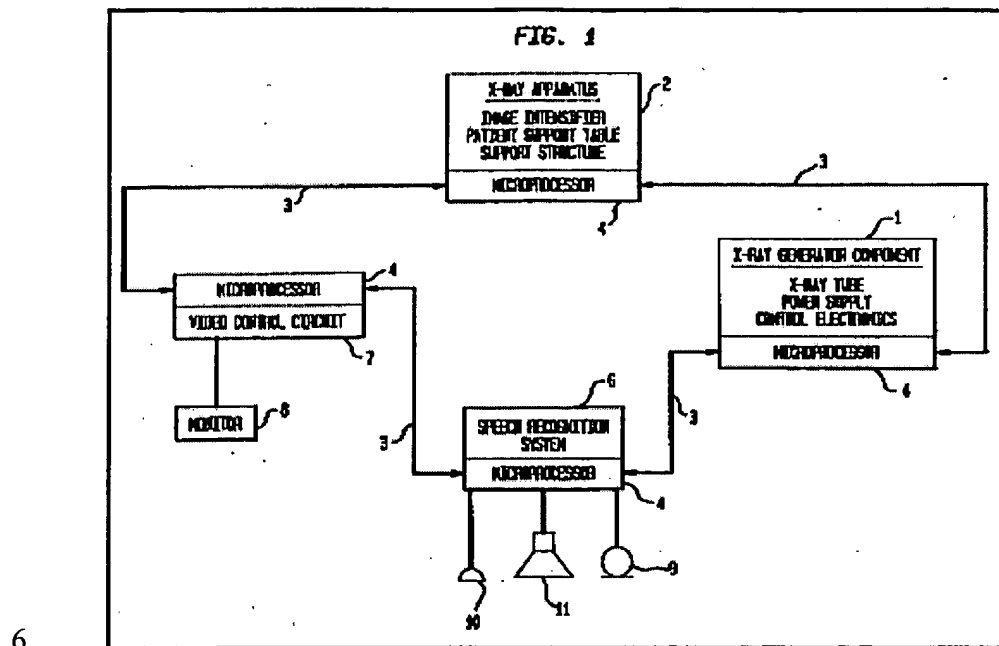


Figure 1 - U.S. Patent 5,440,606 to Faul et al.

7. As per claim 13, Faul et al. disclose an apparatus comprising an x-ray source (1) a detector (2) a patient table (2 - column 2, lines 25-31) a video monitor (8) and a voice activated control system (6) comprising a microphone (9) and micro-processor (column 3, lines 21-25); the processing comprising at least one word and phrase recognition (column 2, lines 64-68, column 3, lines 1-31); the control system (6) coupled to controls for at least one of the x-ray source (1), detector (2) and monitor (8) for executing commands received by the control system (Fig. 1, above; abstract). Examiner treats the presence of an audio amplifier as an inherent device within a microphone; the device functioning to receive and amplify acoustical signals. Faul et al. do not explicitly disclose an apparatus comprising a) a monitor for displaying images and b) a voice control system for controlling playback of images based on a voice command to facilitate analysis of a plurality of acquired images.

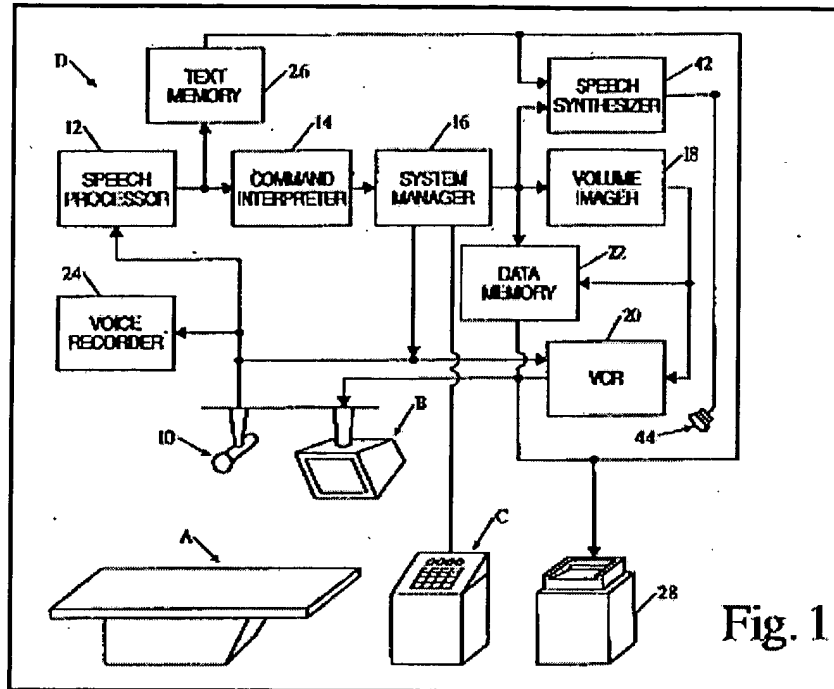


Figure 1 - U.S. Patent 5,303,148 to Mattson et al.

9. Mattson et al. disclose a system comprising a) a monitor (**B**) for displaying images while performing an exam and b) a voice control system (**D**) for controlling playback of images based on a voice command to facilitate analysis of a plurality of acquired images (see abstract; column 2, lines 31-34). Mattson et al. teach that the monitor and voice control system enables a medical practitioner to view images of an object of interest in real time while allowing hands free operation of system components (column 2, lines 53-62). An advantage of such system is that it allows instantaneous analysis of image sets while enabling a practitioner to simultaneously conduct medical procedures (column 1, lines 35-39).

10. It would have been obvious to modify the apparatus of Faul et al. such that it incorporated a) a monitor for displaying images and b) a voice control system for controlling playback of images based on a voice command. One would have been

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motivated to make such a modification so that a medical practitioner could view acquired images in real time, while simultaneously performing other medical procedures as taught by Mattson et al. (column 1, lines 33-39).

11. As per claims 14 and 15, Faul et al. do not explicitly disclose an apparatus comprising an audio amplifier or a highly directional microphone.

12. Mattson et al. disclose a system comprising an audio amplifier or a highly directional microphone (10 – column 3, lines 34-36).

13. It would have been obvious to modify the apparatus of Faul et al. such that it incorporated an audio amplifier and a highly directional microphone. One would have been motivated to make such a modification so that low or soft voice commands are sensed from any position relative to the microphone and amplified so that system components can correctly interpret the received commands, resulting in efficient device operation as taught by Mattson et al. (column 3, lines 34-36).

14. As per claim 16, Faul et al. as modified above, disclose an apparatus further comprising a speaker (11).

15. As per claim 18, Faul et al. as modified above, disclose an apparatus wherein controls comprise x-ray generator controls (4) and image review controls (4).

16. As per claim 17, Faul et al. do not explicitly disclose an apparatus wherein the x-ray source, detector, monitor and microphone are located in an exam room with a microphone sensitivity zone located therein.

17. It would have been obvious to modify the apparatus of Faul et al. such that it was located in an exam room with a microphone sensitivity zone located therein. One would have been motivated to make such a modification so that operator voice commands could

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be easily received by the control system while the examination of a patient is simultaneously being carried out.

Response to Arguments

18. Applicant's arguments filed 5/12/03 have been fully considered but they are not persuasive. In particular, Faul et al. disclose a system comprising an X-ray source, detector, patient table and voice control system. As noted above, Faul et al. (U.S. Patent 4,440,606) do not explicitly disclose a monitor for displaying images and a voice control system for controlling playback of images. Examiner notes that the system is configured such that the components of the system can be actuated by voice command (see abstract; column 3, lines 34-41) and further considers an audio amplifier an inherent device within a microphone whose primary function is to receive and amplify acoustical signals. In order to overcome the above noted deficiencies of the Faul et al. reference, Mattson et al. (U.S. Patent 5,303,148) is applied for its relevance to practitioners in radiology, surgery and others (column 1, lines 14-18; column 53-55). Mattson et al. teach a system comprising a monitor for displaying images and a voice control system configured to control playback of images. Mattson et al. teach that such a system enables the hands free viewing of selected images on a display while allowing a user to simultaneously carry out additional tasks. An immediate benefit of such a system can be realized in medical procedures such as surgery as taught by Mattson et al.

19. The formulation of the Office Action is based on the teachings of the combined references and their relation to Applicants' claimed limitations. The aforementioned references, in combination, provide the foundation for the enclosed obviousness rejection.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (703) 306-0473. The examiner can normally be reached on M - F (9 am - 5 pm).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305 3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0530.

Courtney Thomas

May 20, 2003


ROBERT H. KIM
SUPERVISORY PAPER EXAMINER
TECHNOLOGY CENTER 2003